
Chapter 5

RECOMMENDATIONS



Figure 5.1: Chestnut Hill Reservoir (2005)

General Recommendation

1. Management Goals

In order for the Resource Management Plan for the Chestnut Hill Reservation to be successful, DCR will embrace management goals that recognize the importance of the Reservation as an historical, cultural, architectural, and recreational landscape. The RMP supports the following management goals and objectives for the Chestnut Hill Reservation:

- **Preserve, protect, and enhance the extant features associated with both the primary and secondary historic periods and contexts identified in this RMP, while allowing for present day use within the Rehabilitation area.** Treatment of the Reservation and its character-defining features will in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* as well as the Standards and Criteria set forth by the Boston Landmarks Commission.
- **Preserve, protect, and enhance the historic features associated with the primary period of significance (1868-1926) within the Restoration zone from Gatehouses #1 to Gatehouse #2 in order visually illustrate the appearance of the Reservoir in 1901 as an interpretive exhibit.**
- **Recognize the history of Chestnut Hill Reservoir within the context of the greater Metropolitan Water Supply system.** Develop interpretive programming that relates the Reservoir to the Waterworks and other sites within the metropolitan Boston water supply system.
- **Provide a place for passive recreation and quiet enjoyment.** Include a universally accessible pathway to serve a wide range of recreational users.
- **Balance historic landscape preservation with recreation and natural resource protection.** Maintain the historic structures and landscape, and conduct vista clearing using practices that avoid adverse impacts to woodland health and wildlife habitat.
- **Ensure that park users feel safe.** Develop and promote a program of regular DCR or other law enforcement and staff presence; eliminate areas with perceived safety concerns; improve pedestrian egress from the inner loop (perimeter path).
- **Strengthen and coordinate partnerships** to support a common vision for the Chestnut Hill Reservation, leveraging private funding for capital, operations, maintenance and programming needs; identify and explore New Models for Stewardship.

- **Establish equal levels of DCR custody, care, and control for all areas of the Reservation under its management,** including permanent/long-term agreements related to the driveway parcel.
- **Establish formal agreements for specialized use of Reservation lands** such as the community gardens and restricted parking areas.
- **Clarify and promote park rules and regulations** that are clear, concise, and communicated in an attractive form that is easy for the park user to follow.
- **Establish a sustainable and maintainable landscape** that will enhance wildlife habitats while managing invasive species of plants and animals.

2. Preservation Treatment

The Resource Management Plan for Chestnut Hill Reservation is intended to meet a number of diverse objectives, focused primarily on preserving and enhancing the historic character of the Reservation, improving public use through enhanced site access and circulation, and adapting the site to meet current safety, access and park standards. To accomplish these diverse goals, this chapter considers four philosophical approaches for the treatment of the Reservation landscape based on the *Secretary of the Interior's Standards for the Treatment of Historic Properties*, revised in 1995.

A treatment is a physical intervention carried out to achieve a historic preservation goal – it cannot be considered in a vacuum. There are many practical and philosophical variables that influence the selection of a treatment for a historic property. These include, but are not limited to, the extent of historic documentation, existing physical conditions, historical value, proposed use, long and short term objectives, operational and code requirements, and anticipated capital improvement, staffing, and maintenance costs.¹

The Secretary's Standards include four distinct philosophical approaches that define the extent and intent of physical changes proposed for an historic property. The treatments, Preservation, Rehabilitation, Restoration, and Reconstruction, each vary in the level of intervention, required documentation and appropriate application:

- **Preservation** “maximizes the retention of distinctive materials, features, spaces, and relationships” through maintenance and repair of existing features as the property has evolved over time. While protection and stabilization and work are included, the focus of preservation treatment is on retention and maintenance, while avoiding replacement of intact or repairable historic materials.
- **Rehabilitation** is an inclusive treatment that provides for a broad range of interventions to both meet contemporary uses and retain historic character. This includes the retention and maintenance of existing historic features, as well as selective changes to the property provided the overall historic character is not compromised.
- **Restoration** illustrates a specific earlier historic period by removing non-historic features, replacing missing features from the restoration period, and retaining extant historic features. Because the intent of restoration is to re-create an authentic historic property associated with a specific historic period, the replacement of missing historic features should be identified and chosen through substantial documentary and physical evidence.
- **Reconstruction** recreates a vanished historic property through new construction, when absolutely necessary and no other interpretive method can convey the information. This treatment is, in reality, rarely used.

3. Recommended Treatment

a. Reservation Treatment

The philosophical approach for the treatment of the Chestnut Hill Reservation represents a strategy for long-term management of the landscape founded on its significance, existing conditions, and use; it also balances issues of access and preservation with contemporary use and requirements.² Based upon the goals and objectives stated above, the RMP recommends the *Rehabilitation* treatment for most of the Chestnut Hill Reservation, excluding the Restoration zone from Gatehouse #1 to Gatehouse #2 described below. Rehabilitation combines the retention and maintenance of existing historic features, with limited new construction to meet current needs, and allows selected replacement of missing historic features necessary to retain the property's historic character. This treatment approach allows for the

adaptation of the historic landscape to accommodate contemporary use (passive recreation). This treatment is also preferred because it does not require the reconstruction of missing features or the full restoration of the landscape to a specific period of time, investments which would be unsustainable given existing resources and management capacity. This treatment approach allows for the adaptation of the historic landscape to accommodate contemporary use (passive recreation).

Rehabilitation is the only treatment that also allows for the construction of new additions or alterations to meet contemporary uses provided that, when removed in the future, the “essential form and integrity” of the site would remain unimpaired. In this regard, the new work should be differentiated from the historic features, but should remain compatible in terms of “materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.” In some cases, rehabilitation is chosen when a historic resource is so deteriorated that repair work requires substantial intervention, well beyond what is normally considered appropriate in preservation. Finally, rehabilitation can also accommodate a limited amount of replacement of missing historic features in kind, or with a new design that is compatible with the original feature and with the current character of the property. However, Rehabilitation prohibits “changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties.” This would also include replacing missing features in another location. Taken together, rehabilitation is the most flexible and accommodating of the four treatments.

For the Chestnut Hill Reservation, rehabilitation is an ideal treatment for most of the site because it expressly addresses historic properties that must continue to meet contemporary uses. The Reservation is a property actively used by the surrounding community and provides both a unique recreational, natural, and historical resource. With an emphasis on repair, historic character, and contemporary use, the treatment Rehabilitation can easily form the framework for interventions needed to meet the RMP objectives outlined above.

b. Restoration Zone

The DCR has identified an additional interpretive objective to visually communicate the appearance of the Reservoir during the primary period of significance. Because this represents a more labor-intensive approach

to landscape maintenance, the entire dam from Gatehouse #1 to west of Gatehouse #2 will be restored as an educational tool to illustrate the property as it looked in 1901, the height of operation for the Reservoir and the end of much of the associated construction. This includes the area from the toe of the slope along Beacon Street, to the water’s edge, extending parallel along the dam to the Reservoir from the north side of Gatehouse #1 to an area west of Gatehouse #2. The crushed stone perimeter path is included in the Restoration zone, but the sidewalk along Beacon Street is not.



Figure 5.2: Restoration treatment area

Restoration as a treatment depicts the “form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period.”³ Because it involves removal of later features and the replacement of missing historic features, Restoration requires a higher level of documentation and substantiation, necessary to ensure historical accuracy.



Figure 5.3: Photograph showing Gatehouse #1 from 1898 (DCR)

For the Chestnut Hill Reservation, restoring the area from Gatehouse #1 to Gatehouse #2, illustrated in figure 5.2, requires the removal of the later 1928-29 fence and the management of the area with a high level of active maintenance. Several historic photographs dated 1901, provide the specific documentation related to the landscape's character during at the time. This included closely-mown turf on the dam, a highly maintained crushed stone path, and small shrub plantings flanking the steps to Gatehouse #2.



Figure 5.4: Photograph showing Gatehouse #2 from 1901 (DCR)

While street trees are evident in historic photographs from the early 1890s, by 1901 they are gone from the Reservoir side of Beacon Street between Gatehouses #1 and #2. Park benches are not evident in this area as well. Given the complex multi-jurisdictional management and access required in front of Gatehouse #1, the vehicular courtyard extending from Beacon Street will remain in the Rehabilitation zone. Only the Gatehouse building and its immediate setting, including the dam and pedestrian steps, are located within the Restoration zone. In order to implement this recommendation, an agreement between the MWRA and the DCR will be required for this area. The Rehabilitation and Restoration standards are included at the end of Appendix C.



Figure 5.5: Photograph showing the Reservoir and Beacon Street from 1901 (DCR)

4. Land Stewardship Zoning Guidelines

As part of the 2003 legislation creating the Department of Conservation and Recreation (DCR), the legislature also required the preparation of management plans for state parks, forests and reservations under the care of DCR. Management plans must include guidelines for operation and land stewardship of natural and cultural resources, and ensure consistency between recreation, resource protection, and sustainable forest management.

In February 2006, the DCR Stewardship Council approved the Land Stewardship Zoning Guidelines for resource management plans. The Guidelines define three types of zones and are intended to provide a general land stewardship zoning framework that is flexible and that can guide the long-term management of the DCR property. The three zones can be supplemented with significant feature overlays that identify specific designated/recognized resource features (such as Forest Reserves, Areas of Critical Environmental Concern or areas with historic preservation protections).

Land Stewardship Zoning Guidelines provide a foundation for recommendations that will address resource stewardship and facility management objectives, and are intended to cover both existing DCR property or facility conditions and desired future conditions for the property or facility. Proposals for changing the Guidelines already approved in a Resource Management Plan must be submitted to the Land Stewardship Council for review and adoption.

The land stewardship zones and significant feature overlays associated with Chestnut Hill Reservation are illustrated in Figure 5.6 and described in detail below:

a. Applicable Land Stewardship Zones

Chestnut Hill Reservation has two applicable stewardship zones and a Cultural Resource Overlay. Because the Reservation is listed on the National Register of Historic Places and is a designated Boston Landmark, the majority of the property is contained within the Cultural Resources Overlay, providing a high level of protection to the landscape as a whole. Zone 2 guidelines are recommended for the Reservoir landscape, pathways and wooded areas, while Zone 3 guidelines are more suitable for the more developed areas such as paved park roads and the rink/pool area.

b. Significant Feature Overlays - Cultural Resource Overlay

General Description

The three land stewardship zones may be supplemented with significant feature overlays that identify specific designated/recognized resource features. These significant features are generally identified through an inventory process or research, and are formally designated. The purpose of these overlays is to provide more precise management guidance for identified resources and to recognize, maintain, protect, or preserve unique and significant values, regardless of the zone in which they occur. Examples of significant feature overlays include Forest Reserves, areas subject to public drinking water regulations, or areas subject to historic preservation restrictions.

Chestnut Hill Reservation Cultural Resource Overlay

The Cultural Resource Overlay at Chestnut Hill includes all parts of the property listed on either the National Register of Historic Places or designated a local landmark by the Boston Landmarks Commission (BLC). These historic designations exclude only the Reilly Rink and Pool area, the Gatehouse #1 area, and the Shaft #7 parcel (which DCR does not control). Procedures for the protection of cultural resources, including regulatory compliance with the Massachusetts Historical Commission and the BLC, can be found in Chapter 4 of this RMP.

Although the Gatehouse #1 parking area is not currently included in either historic designation, research conducted as part of this RMP indicates that the area could be

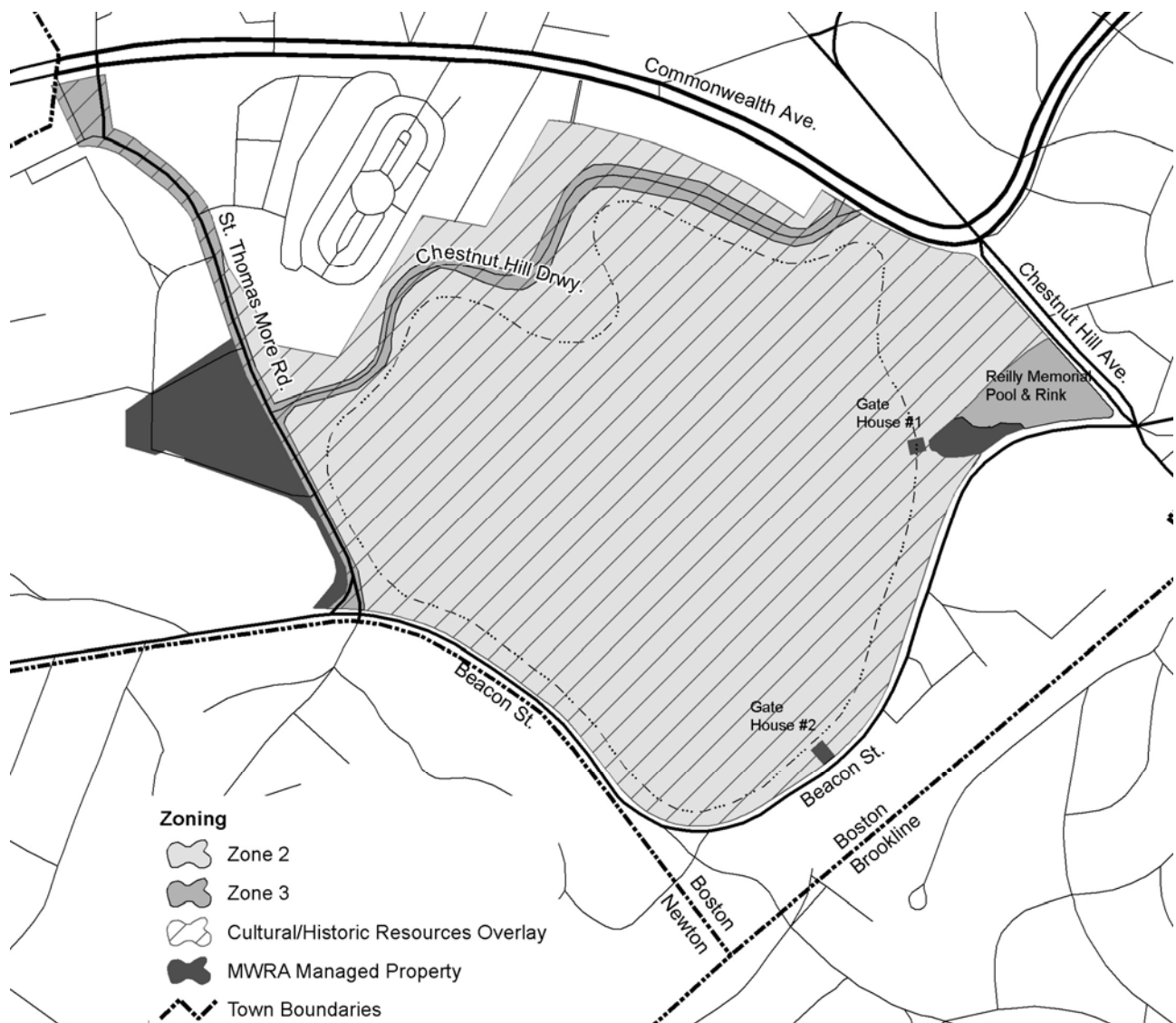


Figure 5.6: Chestnut Hill Reservation land stewardship zoning (DCR)

included in a National Register nomination that addresses the proposed secondary periods of significance. If this area were to be placed under the care and control of DCR it would be contained within the Cultural Resource Overlay. Since the gatehouses and Shaft #7 are under the control of MWRA, no zoning has been assigned in this RMP.

c. Zone 1

Although Chestnut Hill Reservation is a significant cultural landscape, Zone 1 guidelines are not recommended for any part of the property. Instead, the guidelines of the Cultural Resource Overlay apply. The following description is provided for reference only.

General Description

This zone includes unique, exemplary and highly sensitive resources and landscapes that require special management approaches and practices to protect and preserve the special features and values identified in the specific Resource Management Plan. Examples of these resources include rare species habitat identified by the Natural Heritage & Endangered Species Program as being highly sensitive to human activities, fragile archaeological or cultural sites, and unique or exemplary natural communities. Management objectives emphasize protecting these areas from potentially adverse disturbances and impacts.

General Management Guidelines

- Only dispersed, low-impact, non-motorized, sustainable recreation will be allowed provided that the activities do not threaten or impact unique and highly sensitive resources.
- Existing trails and roads will be evaluated to ensure compatibility with identified resource features and landscape, and will be discontinued if there are suitable sustainable alternatives. New trails may be constructed only after a strict evaluation of need and avoidance of any potential adverse impacts on identified resources. New roads may only be constructed to meet public health and safety needs or requirements; however, the project design and siting process must avoid any potential adverse impacts on identified resources and demonstrate that there are no other suitable alternatives.
- Vegetation or forest management will be utilized only to preserve and enhance identified resource features and landscapes.

d. Zone 2 - Reservoir Landscape and Woodland

General Description

This zone includes areas containing typical yet important natural and cultural resources on which common forestry practices and dispersed recreational activities can be practiced at sustainable levels that do not degrade these resources and that hold potential for improving their ecological health, productivity and/or protection through active management. Examples include terrestrial and aquatic ecosystems characterized by a diversity of wildlife and plant habitats, rare species habitat that is compatible with sustainable forestry and dispersed recreation, agricultural resources, cultural sites and landscapes. Zone 2 areas may be actively managed provided that the management activities are consistent with the approved Resource Management Plan for the property.

General Management Guidelines

- Management approaches and actions may include a wide range of potential recreational opportunities and settings that are consistent and compatible with natural resource conservation and management goals.
- Protect and maintain water quality by providing for healthy functioning terrestrial and aquatic ecosystems.
- Provide a safe, efficient transportation network with minimal impact on natural and cultural resources while serving public safety needs and allowing visitors to experience a variety of outdoor activities.
- New trails may be allowed dependent upon existing area trail densities, purpose and need, physical suitability of the site, and specific guidelines for protection of rare species habitat and archaeological resources.
- Sustainable forest management activities may be undertaken following guidelines established through ecoregion-based assessments, district level forestry plans, current best forestry management practices, and providing for consistency with resource protection goals.
- Utilize Best Management Practices for forestry and other resource management activities to encourage native biodiversity, protect rare species habitats and landforms.
- Roads may be constructed if access for resource management or public access is needed and construction can be accomplished in an

environmentally protective manner. Existing roads will be maintained in accordance with the DCR road classification system and maintenance policy.

- Additional site-specific inventory and analysis may be needed prior to any of the management activities described above to ensure that no adverse impacts occur to previously un-documented unique and sensitive resources and landscape features.

e. Zone 3 - Roads and Reilly Rink/Pool Area

General Description

This zone includes constructed or developed administrative, maintenance and recreation sites, and resilient landscapes that accommodate concentrated use by recreational visitors and require intensive maintenance by DCR staff. Examples include areas developed and deemed appropriate for park headquarters and maintenance areas, parking lots, swimming pools and skating rinks, paved bikeways, swimming beaches, campgrounds, playgrounds and athletic fields, parkways, golf courses, picnic areas and pavilions, concessions, and areas assessed to be suitable for those uses.

General Management Guidelines

- The management approach and actions will emphasize public safety conditions and provide for an overall network of accessible facilities that meets the needs of DCR visitors and staff.
- Maintenance of these facilities and associated natural and cultural resources, and new construction or development, will meet state public health code, and state building code and environmental regulations.
- Shorelines and surface waters may be used for recreation within constraints of maintaining public safety and water quality.
- Historic restoration, rehabilitation or reconstruction for interpretation or adaptive reuse of historic structures will be undertaken only in conjunction with a historic preservation plan.
- To the greatest extent possible, construction will include the use of "green design" for structures, such as use of low-flow water fixtures and other water conservation systems or techniques, solar and other renewable energy sources, and the implementation of Best Management Practices to protect the soil and water resources at all facilities.

Site-Specific Recommendations

The following recommendations have been developed collaboratively with the DCR, and are intended to address the analysis of current conditions described in Chapter 3 and meet the RMP objectives defined above. They include a broad range of recommended actions to enhance resource stewardship, public use, and park management. This section of the RMP also refers to the Site Treatment Recommendations Plan which presents a graphical compilation of these site-specific recommendations. The priorities and recommended strategy for implementing the recommendations are included in Chapter 6 – Implementation Strategy.

Natural Resource Recommendations

The overall character of the Reservation consists of an island of natural resources within a larger urban and suburban setting, highly valued by residents as a natural asset to the densely developed community. The vegetated portions of the site currently offer a moderately desirable aesthetic value and limited wildlife habitat. To maintain and enhance these aesthetic values, management recommendations address both invasive species and methods to enhance wildlife habitat. These recommendations for natural resource management should also be balanced with the other proposed treatment recommendations and the historic character of the Reservation.

Natural resource recommendations are limited to vegetation and nuisance wildlife management within the site, in so much as these recommendations are contained within the overall goals for the Chestnut Hill Reservation. Long term strategies should be developed to promote a native community of plant species within the site that buffer land uses, deter a resident population of Canada geese, and protect and enhance wildlife habitat. The desired plant community should ultimately provide valuable cover, foraging, and nesting habitat for resident and migratory wildlife and contribute to the overall vegetative community and composition within the Reservation. Additional recommendations are included in the Vegetation Management Plan (VMP) developed in conjunction with this RMP.

Recommendation: Remove and control invasive species.

Invasive exotic species are generally defined as non-native plants that have aggressively invaded naturally

occurring plant communities.⁴ Virtually every habitat within the Reservation contains one or more invasive plant species, including Oriental Bittersweet (*Celastrus orbiculatus*), Black Locust (*Robinia pseudoacacia*), Norway Maple (*Acer platanoides*), European Buckthorn (*Rhamnus frangula*), Multiflora Rose (*Rosa multiflora*), Purple Loosestrife (*Lythrum salicaria*), and Garlic Mustard (*Alliaria officinalis*). Poison ivy, although not considered an invasive species, presents a management challenge within the site as it occurs as a low-growing groundcover and as a climbing vine that winds around trees and shrubs within the upland portions of the site. Invasive species removal and native vegetation installation will optimize wildlife habitat for the widest range of bird and animal species. Specific recommendations for invasive species management are described below.

- Manual and mechanical techniques such as hand and tool pulling, hand cutting, mowing, girdling, brush-cutting, mulching and tilling can be used to control some invasive plants, particularly for relatively small populations.
- Biological control is an option to hinder the growth and spread of Purple Loosestrife (*Lythrum salicaria*). The use of *Galerucella* spp. as a biological control for *L. salicaria* has proven effective, with a success rate of up to 90% in other areas of North America without visible environmental repercussions.⁵
- Chemical control techniques involve the use of herbicides that kill or otherwise impair an individual's competitive ability. Application methods include foliar application by spraying, application to cuts in the stem or trunk, application to cut stems and stumps during the dormant season.⁶
- Replant and re-seed areas of invasive species removal in order to promote a native understory. There are several alternative seed mixtures that may be appropriate for the upland and wetland areas, which are best planted in early spring. The seed mixtures are comprised of species native to New England and are available in mixtures tailored for both upland and wetland restoration.
- Conduct routine invasive species maintenance. Follow-up invasive species removal should be conducted on an annual basis. The use of selective herbicide application will further deter any aggressive species (i.e. European Buckthorn, Speckled Alder).⁷

Recommendation: Enhance the forested upland and wildlife habitat.

Maintaining the forested upland on site with well-developed canopy, mid and understory growth and enhancing the remaining vegetated areas throughout the Reservation is critical for sustainable wildlife populations.

- Create and maintain vegetated structure between canopy, mid-story, and understory to promote wildlife habitat;
- Install native species where appropriate, to create a canopy and understory of equal or greater density, diversity, and value as existing conditions.
- Enhance and expand native understory in appropriate locations.
- Mulch exposed root systems near the trail network to protect trees and associated root zones and to stabilize soil.
- Remove and prune dead wood from trees within reach of the trail system.
- Provide adequate cavity and den tree habitat for wildlife for food and cover habitat. Create wildlife snags (dead or dying trees left on site) if practical in areas where they would not pose a threat to visitor safety.
- Increase diversity and species richness by removing invasive species.
- Prevent spread of invasive species through removal and subsequent monitoring.
- Conduct follow-up monitoring to assess invasive species re-growth, success of native plant installation, utilization of vegetation by resident and migratory species. Re-plant native species as necessary.

Recommendation: Selectively thin understory vegetation.

Forest understory is critically important to wildlife and provides feeding, breeding, nesting, and cover habitat for a variety of birds and small mammals. With deliberate management, those portions of the understory dominated by invasive species can be replaced with an understory comprised of herbaceous species beneficial to wildlife. The appropriate time of year for removal of invasive species is during the winter, to minimize disturbance of wildlife, particularly nesting habitat. Native species that provide wildlife habitat should be retained. Retention or creation of snags and large woody debris within the

interior portions of the forested area and beyond typical public access is also critical to promote habitat. As specific actions are developed for site improvements, the following should be considered related to enhancing wildlife habitat:

- Selective thinning of understory vegetation should focus on invasive species removal.
- Schedule vegetation thinning to minimize disturbance to nesting wildlife. Thinning should not disturb or remove wildlife nesting and den habitat.
- Maintain brushy areas next to wooded edges for nesting and cover habitat, in particular for small mammals and birds that utilize these important ‘edge’ ecotones.
- Conduct follow-up monitoring to monitor and prevent invasive species from colonizing thinned area.

Recommendation: Control the Canada Geese population

Canada geese can denude grassy areas within the site and their droppings are also a public health concern. LEC observed a flock of resident Canada Geese within the open water Reservoir and within the grassy portions of the site during their evaluations. The Canada Geese may also present a threat to Reservation visitors that encounter the geese and may be chased, scared, or deterred from the park by these aggressive birds. Non-lethal methods of controlling the resident Canada goose population include habitat modification, installation of fencing, and visual deterrents. Lethal methods, including egg addling, are considered effective, legal management techniques.⁸ DCR should incorporate habitat modification into its vegetation management practices to effectively minimize the attractiveness of the Reservation to geese. Habitat modification includes:

- Installing landscape plantings that physically reduce access to forage areas.
- Replacing existing grassy areas with low-growing groundcover not desirable to Canada geese.
- Removing goose-preferred grasses such as fescues or timothy and replacing with coarser grasses.

Cultural and Recreational Resources Recommendations

The following recommendations address specific features, resources, and areas of the Chestnut Hill Reservation that have been altered by human use to meet specific functional and aesthetic objectives. This includes features that were constructed historically, as well as more recent additions. The organization of these recommendations generally follows the inventory and analysis subsections in Chapter 3.

1. Cultural Landscape

Recommendation: Preserve and enhance the historic character of the cultural landscape.

The features, materials, and spaces described below are components of the Chestnut Hill Reservation cultural landscape. As such, the recommendations that follow address specific actions needed to improve landscape character along with other goals for the Reservation. Some of the most important and critical recommendations needed to enhance the character of the cultural landscape include improvements to the Chestnut Hill Driveway, entry at Gatehouse #1, specimen trees, pedestrian circulation along the Reservoir perimeter, and the treatment of the perimeter fence. As discussed earlier in this chapter, the cultural landscape will be managed according to the treatment Rehabilitation, with the dam structure from Gatehouse #1 to west of Gatehouse #2 included in a Restoration zone, with a restoration date of 1901.

2. Reservoir and Dam

Recommendation: Preserve the existing Reservoir and Dam.

The Reservoir is the prime focal point for the Reservation. As such, the Reservoir shoreline and water level should be actively preserved and maintained. Any erosion or damage to the dam slopes should be immediately stabilized and repaired. Every effort should be made to sustain a constant water level. In addition, the water quality should be maintained to high standards with regular water testing by the MWRA. Invasive aquatic plants, such as Purple Loosestrife, should be removed. Any trash or pollution dumped into the Reservoir should be immediately removed and the shoreline rip-rap maintained, kept clean of trash and debris, and free of encroaching vegetation.

3. Gatehouse #1 Area

Recommendation: Negotiate with the MWRA for use of Gatehouse #1,

DCR and the MWRA should negotiate an amendment to the 2002 agreement to include DCR management of the building or have MWRA pursue the state surplus process through DCAM. Negotiations should also include a discussion of the management and future use of the paved parking area below Gatehouse #1, which is currently under the control of the MWRA.

Recommendation: Stabilize and repair Gatehouse #1.

The MWRA, the DCR, or a partnership thereof should commit to funding the baseline (stabilization) capital repairs on Gatehouse #1 as indicated in the GZA GeoEnvironmental, Inc. March 1998 report to the MWRA. These repairs should include the minimum cost of \$233,000 (in 1998 dollars) to fill and close off the lower chambers with flowable fill and granular fill mix as recommended in the report. This will allow a complete and safe floor base for the upper part of the Gatehouse. As stated in Chapter 3, the upper part of the structure is in good condition but some maintenance is warranted to prevent future problems. Exterior stone masonry should be re-pointed, cracks repaired, and vines removed. The hip coverings at the roof may need to be replaced to stop the water infiltration. There may be some moisture damage in the roof sheathing and framing near the bottoms of the hips and these wood members will need to be replaced to match the historic roof framing.

Following immediate repair and stabilization of the structure, the DCR should pursue a restoration treatment for the exterior of the gatehouse, consistent with the treatment of the dam structure landscape from Gatehouse #1 to west of Gatehouse #2. New glass to match the historic glass will need to be installed in the windows following removal of the brick. A new entrance door to match the historic door will be required for the upper level entrance. The existing cupola should be removed and replaced with a new cupola that restores the original cupola design. Every effort should be made to ensure that any repair and improvement to the Gatehouse be made to respect the original historic design and to meet the Secretary of the Interior's Standards for Restoration. Future work is also subject to review by Boston Landmarks Commission and Massachusetts Historical Commission.

To ensure the longer term viability of the Gatehouse as future new use, the DCR should develop a maintenance plan and budget to protect the building until a re-use strategy is put into action.

Recommendation: Consider a future re-use strategy for Gatehouse #1.

Once the priority issue of stabilizing and repairing the Gatehouse is accomplished, the DCR should work with the public in considering a best new use. This re-use should be coordinated with the restoration of the building's exterior and setting, including the exterior steps, the treatment of the vehicular courtyard described below, and in conjunction with existing and future visitor services and Reservation programs.

Recommendation: Repair and restore the exterior stone steps and walls below Gatehouse #1.

This area, which is within the Restoration zone, should serve as the primary pedestrian gateway into the Reservation leading from the vehicular courtyard below up to the top of the dam. The steps and cheek walls require repairs and re-mortaring for safe pedestrian use. Consistent with the treatment Restoration, the existing columns and gates should be removed as they were installed with the 1928-29 fence, after the 1901 restoration date.

Recommendation: Consider future options for the entry and existing parking area below Gatehouse #1.

This feature is a critical component of the primary gateway into the Reservation. While the Gatehouse is included in the proposed Restoration zone, the vehicular courtyard will be treated following the Standards for Rehabilitation, which will allow for the adaptation of this area to meet current uses. However, recovery of the historic character of the courtyard is a priority for this RMP. Options for rehabilitating the vehicular courtyard and parking area include:

- Minimize parking for daytime use only. Place a time limit on parking.
- Maximize parking for both the Reservation and night time Reilly Rink use.
- Rehabilitate the original historic entrance and turn-around drive, including reconstructing the missing historic fountain.⁹

- Provide an accessible route from the parking area to the top of the dam and Gatehouse #1 within the Rehabilitation area.
- Incorporate parking and/or a safe drop-off area and access route for the Reilly Rink & Pool.

In order to achieve this recommendation, an agreement between the MWRA and the DCR for this area will be required.



Figure 5.7: Existing parking area below Gatehouse #1 (2006)

4. Other Buildings and Structures

a. Gatehouse #2

Recommendation: Repair the stone steps below Gatehouse #2.

This area should serve as an important pedestrian gateway into the Reservation from the Beacon Street sidewalk. The steps require minor repairs and re-mortaring for safe pedestrian use.

b. Intermediate (Cochituate) Gatehouse

There are no recommendations for the Intermediate (Cochituate) Gatehouse. It currently remains under MWRA management and control.

c. Reilly Memorial Pool and Rink

Recommendation: Redesign landscape around the Reilly Memorial Pool and Rink to beautify and buffer area.

The Reilly Pool and Rink building is an unattractive structure and much of the existing vegetation is either

overgrown or in poor condition. The landscape around the building and pool should be completely renovated with a new design that acts to beautify and screen the buildings since the pool is in very close proximity to Chestnut Hill Avenue and the Cleveland Circle area and is visible from the roadway. Signage should be installed in appropriate areas to readily identify Rink and Pool. This landscaped area will likely have a more intensely structured design character than the other parts of the Reservation.



Figure 5.8: Reilly Pool & Rink landscape (2006)

d. Freestanding Walls

Recommendation: Repair and repoint the Chestnut Hill Avenue retaining and freestanding walls.

Immediate repair is needed on these walls to avoid more serious deterioration. While it is possible to make repairs to the freestanding wall that will last for some time, repairs to the retaining wall will require frequent maintenance in the absence of a waterproof membrane on the earth side to prevent water infiltration. These repairs include:

- Deeply raking 100 percent of the joints and repoint all of the mortar joints, using a mortar color compatible with the stone color and soft enough (Type N) to move without cracking and permeable enough to allow migrating vapor to pass through it.
- Resetting the displaced cap stones.
- Setting fallen stones back into the cavities in the faces of the wall. Where there are one or more stones of a similar size that have fallen out together, the stones should be toothed into the wall so they cannot loosen as a group in the future.

Annual inspection and immediate necessary repair work is recommended after the overall repair work is complete.

Recommendation: Repair and re-point the freestanding entry sign walls.

To prevent future water damage, chip back the butt joint mortar in the capstones to form recesses and apply a tinted sealant across the joint to waterproof the joint. Re-point the face of the wall as required.

Recommendation: Extend the western freestanding sign wall at the Commonwealth Avenue entrance to restrict unauthorized vehicular access onto this corner of the Reservation.

Maintenance vehicles for the adjacent apartment buildings frequently park in this landscape area. Extending the wall will prohibit vehicular entry.

e. Retaining Walls

Recommendation: Repair and re-point the Chestnut Hill Driveway retaining walls.

These two tiered walls are located on the south side of the Chestnut Hill Driveway. The existing outer pathway passes below the upper wall. Based upon onsite observations, no repair work is needed for the upper wall. The upper half of the lower wall generally needs to be raked and re-pointed with missing chinking stones replaced.

f. Overlook

Recommendation: Preserve, repair, and maintain the existing 1977 overlook and railing.

The overlook is in fairly good condition overall, however the stone retaining wall masonry units require some minor repointing. Any new path to the overlook needs to be made flush with the existing grade of the overlook to allow for full accessibility.

5. Vegetation

Recommendation: Prepare a Vegetation Management Plan for the Reservation.

A comprehensive vegetation management plan should be developed to preserve the historic character of the site, protect and enhance wildlife habitat, insure public access and safety, enhance the native vegetation and remove invasive species, remove hazard trees and large dead branches in pedestrian areas, vista clearing and maintenance, recommended plantings, and to promote soil and water quality. The specific recommendations

contained in a vegetation management plan are long-range planning recommendations intended to maintain and promote a healthy ecosystem of diverse native species with high habitat value.

Recommendation: Selectively prune major trees and remove hazardous branches and dead trees in areas adjacent to pedestrian areas.

Based upon the Heritage Tree inventory and analysis, many trees need pruning to re-establish a more healthy form and to remove dead limbs. Several other trees are either dead or in a state of such poor health that they pose a threat to public safety and warrant removal. Dead trees that are sufficiently located away from pedestrian and vehicular areas can remain to provide wildlife habitat. A qualified arborist should be used for all pruning and removals using the specifications set forth in the recommended vegetation management plan.

Recommendation: Remove/control invasive species and poison ivy.

As documented in the Natural Resources section of Chapter 3 and in the natural resources recommendations above, there are a number of invasive plant species throughout the Reservation. Every effort should be made to either eradicate or control invasive plants and poison ivy.

Recommendation: Selectively clear understory vegetation to maintain and enhance the view from the hill behind the Reilly Memorial Pool and Rink to the Reservoir.

There is a significant view of the Reservoir from the top of the rock outcropping. The understory vegetation below the canopy trees should be selectively cleared on an annual basis to maintain the view, consistent with the natural resources recommendations described earlier in this chapter and in the vegetation management plan.

Recommendation: Selectively clear an area of understory vegetation on the north side of the Reservoir to restore the historic “open-park” character and views from Chestnut Hill Driveway.

The area between the inner pathway and the section of the perimeter fence replaced in 1977 northwest of the Reservoir is currently densely vegetated with trees and understory plants. The RMP recommends selectively thinning sections of the understory in this area to establish a view towards the water in all seasons. This area should not be completely cleared due to the steep slopes present in this location and to prevent potential erosion issues.

Understory clearing and thinning should follow the guidelines outlined under the natural resource recommendations. Areas to be thinned should not be in area where it would result in poor views from the Reservoir pathway or where it would open up views to parking or buildings outside of the reservation. Refer to the Site Treatment Recommendations Plan for the location and extent of recommended clearing in this area.

Recommendation: Maintain open view from 1977 overlook on Chestnut Hill Driveway.

The area below the 1977 overlook was cleared in the fall of 2004. This view should be maintained through annual selective pruning and clearing, with low-growing vegetation added to stabilize the slope, in accordance with the vegetation management plan.

Recommendation: Reseed and maintain grass areas on dam.

Eroded and bare grass areas on both sides of the dam should be reseeded and invasive and weedy plants removed. The edge between the path and the grass should be maintained with a distinctive edge to re-establish the historic manicured look that existed along the dam.

Recommendation: Add street trees on the Reservoir side of Saint Thomas More Road.

Additional street trees along Saint Thomas More Road will better define the edge of the road and re-establish the historic character in this area.

Recommendation: Increase tree and understory vegetation in the southwestern part of the Reservation to buffer the Reservation from Beacon Street traffic.

Planting new naturalistic vegetation, in addition to the existing vegetation, will increase the sense of visual separation between the Reservation and the busy Beacon Street.

a. Community Gardens

Recommendations related to the existing Community Gardens are discussed below under Management Resources.

6. Vehicular Circulation

a. Chestnut Hill Driveway

The character of the historic drive has deteriorated since the early 20th century. The Chestnut Hill Driveway should be rehabilitated to re-establish its original historic character and to improve pedestrian circulation, while still functioning as an important part of the public street and parking infrastructure.

The management of the Chestnut Hill Driveway parcel will take into consideration the critical need for resident parking, the significance of the Driveway as part of the historic landscape, and the need to provide equal access to the entire Reservation. Specific guidelines for the Driveway are:

- Minimize changes to the parking area and take into consideration residential parking needs including handicap accessible parking requirements.
- Treatment of the parking area should be a part of a larger plan for Chestnut Hill Driveway.
- Provide an accessible route along the Reservoir side of the Driveway as part of a plan to maximize accessibility while balancing historic preservation needs.
- Maintain some vegetation along the Driveway to screen views of apartment buildings, parking structures, etc. as seen from the Reservoir path to “block the city out.”
- Collect traffic volume and speed data to determine whether any traffic calming is needed and what methods would be appropriate along the Driveway.
- Replace granite crosswalks with a more appropriate accessible surface that does not increase the maintenance burden. Remove granite rumble strips and replace with traffic calming features as determined by traffic data (above).
- Select a replacement lighting fixture that is both historically appropriate and as energy efficient as possible.
- Incorporate provisions for recreational use of the woodland buffer, such as public benches and tables.
- Treatment of the Driveway will be in accordance with the *Secretary of the Interior’s Standards for the Treatment of Historic Properties*.

Recommendation: Conduct a traffic study.

The purpose of the recommended traffic study is to gather data on whether traffic calming is necessary and should be used as a tool for any future repair and rehabilitation of the Driveway.

Recommendation: Rehabilitate Chestnut Hill Driveway as a distinctive pleasure drive and to accommodate a redesigned accessible path.

In the immediate term, potholes and depressions should be repaired and catchbasins and utility manholes set flush with the existing grade. In addition, the existing cobblestone rumble strips, installed as part of the 1977 MDC improvements to serve as speed deterrents, should be removed. The granite block crosswalks and strip between the roadway and parking spaces should be removed as well based on the maintenance issues described in Chapter 3. Crosswalks should be replaced with the standard painted crosswalk symbols. The parking area should be re-striped in the existing configuration. Future improvements of the parking area should include provisions for accessible parking spaces, as none currently exist in the Reservation. DCR should work with the City of Boston to identify ways in which the City might assist with the maintenance (striping, sweeping) of the Driveway in consideration of the parking benefit provided to city residents within the Reservation.



Figure 5.9: Sign located at the entry from Commonwealth Avenue indicating Chestnut Hill Driveway “For Pleasure Vehicles Only” (2006)

During the course of developing the RMP, the DCR determined that parking restrictions in the head-in spaces along Chestnut Hill Driveway are not necessary, and snow emergency signs will be removed from the parking area. Signs will be maintained and restrictions enforced along the remainder of the Driveway.

In the longer term, the Driveway should receive a more intense rehabilitation treatment that includes improvements to the parking, new street lights, improved

vehicular entryways, and new landscape treatments. The parallel parking area should be modified to remove the landscape median. See the Parking and Pedestrian Circulation sections later in this chapter. This realignment can be accomplished with no net loss of existing parking, although accessible parking spaces should be included. The previously described traffic study should be used to determine what, if any, traffic calming measures are needed.

The existing “cobra-head” style street light fixtures along the Driveway should be removed and replaced with a single style light fixture that is compatible with the historic character of the Reservation. See the Lighting section later in this chapter.

Summary of Chestnut Hill Driveway modifications:

- Removal of rumble strips
- Removal of existing street lights
- Repair and repave roadway
- New entry walls at Saint Thomas More Road (See recommendation below)
- Repair of existing Commonwealth Avenue freestanding walls
- New historic-style lighting
- Opening of scenic views and new landscaping
- Standard painted crosswalks



Figure 5.10: Cobblestone strips proposed to be removed along Chestnut Hill Driveway (2006)

Recommendation: Define and create a formal vehicular gateway at the intersection of Chestnut Hill Driveway and Saint Thomas More Road.

The western end of Chestnut Hill Driveway should serve as an official vehicular and pedestrian entrance into the Reservation from Saint Thomas More Road. Landscape elements to add to this area include two freestanding

stone entrance sign walls similar in design to the walls at the Commonwealth Avenue entrance to Chestnut Hill Driveway and distinctive, naturalistic planting. The sign walls should read “Chestnut Hill Reservation, Department of Conservation and Recreation” to reflect the current name and management structure.

b. Saint Thomas More Road

Recommendation: Maintain Saint Thomas More Road

The DCR should continue its maintenance policies on Saint Thomas More Road in cooperation with Boston College.

c. Parking

Recommendation: Modify the area of the parallel parking area along Chestnut Hill Driveway.

In order to bring more usable landscape area into the reservation, the existing parallel parking area with its median island can be removed and replaced with a simpler area of parallel parking immediately adjacent to the eastbound travel lane. This can be accomplished with no net loss of existing parking but does provide new landscape area that was previously taken up by the ingress lane for the parking area and the landscape island. The existing trees in the island can be transplanted to other parts of the reservation. See the Site Treatment Recommendations Plan for the proposed redesign. As per the current parking policy, this modified parking area should be reserved for Reservation daytime use only with a specific time limit of three hours.

d. Pedestrian Circulation

The proposed pedestrian circulation recommendations below are based upon DCR maintenance issues, providing for the continuity and management of the perimeter (“inner”) and “outer” pathway systems, defining clear access points (gateways), modifying the existing paths to maximize universal accessibility, installing additional paths in needed areas, removing non-used paths and desire lines, DCR snow removal practices, and preserving the character defining qualities of the original Reservoir perimeter path. Figure 5.11 shows the recommended final path system.

Recommendation: The existing pathways should be repaired and maintained for safe pedestrian use.

For the immediate short term, the existing paths, particularly the perimeter path should be repaired. This work would include filling of potholes and other

depressed areas. DCR and other public vehicles entering the reservation should take special care entering and driving through the reservation to prevent additional damage to the existing paths and adjacent landscape areas. The longer term plan should include redesigning the path network (see recommendations below).

Recommendation: Define and enhance primary formal pedestrian gateways into the Reservation.

Gateways should be identified and designated for the existing main pedestrian entryways into the Reservation. These gateways should be visually prominent and readily identify to the visitor that they are entering into a DCR property. There should be standard, uniform design elements for these gateways such as signs, interpretive information, ornamental bollards, planting, and distinctive paving patterns and materials. All signage should comply with the DCR Graphic Standards. Gatehouse #1 should serve as the primary pedestrian gateway into the site.

Recommendation: Improve, reconfigure, and simplify the existing path network to improve pedestrian access.

Widen and repave the Reservoir perimeter path.

The stonedust pathway around the Reservoir should be repaved to follow the alignment of the original perimeter pathway and eliminate areas of dual pathways. The path should be surfaced with stonedust to maintain a typical, consistent 10-foot width, which is more similar to the historic character than the current path. (For the portion of this path in the southwestern part of the reservation, see the following recommendation.) This does represent an increased width beyond the historic 8 foot-wide path, but is needed to accommodate the increased use of the Reservation. The 10 foot, multi-use path will also help protect the bordering turf, because users traveling in two directions will have sufficient room to pass each other and will not be inclined to step off the stonedust surface. The depth of the subbase for this path should also be tested to see if the depth and material is adequate to allow for vehicular traffic, since it is likely this pathway will continue to provide limited access for official DCR and MWRA vehicles. If it is not sufficiently deep, the full depth of the stonedust pavement should be deepened to prevent vehicular damage in the future. The surface of the path will need to be crowned to allow for adequate drainage and to prevent future issues with puddling. The grass areas immediately adjacent to the path should be repaired once the paving is complete. A stabilizer for the



Figure 5.11: Proposed circulation diagram

stonedust should be considered to control dust and to protect the path.

Design and pave the dual paths in the southwestern part of the Reservation into a combined, single bituminous concrete/stonedust path.

This section of the 1928-1929 fences should be removed and the existing dirt paths replaced with a new 10' path that follows the original alignment of the perimeter pathway. Since this pathway serves both as a Reservation path and a pedestrian route in winter, the new path surface should be stable enough to hold up to mechanical snow removal. One solution is to install a new 4 foot wide stonedust path on the Reservoir side with a 6 foot wide bituminous concrete path immediately adjacent on the Beacon Street side (see the Site Treatment Recommendations Plan). Starting in the area by the existing vehicular gate at the western end of the dam, this combined path will continue up alongside Saint Thomas More Road until they split at the area by the existing vehicular gate across from the Boston College fields. The bituminous concrete side should be the only side

snowplowed since stonedust is prone to damage from snowplows. To ensure proper drainage in this area, the new two pavement path should be properly graded to shed water away from the Reservoir. The existing drainage swale and catch basin system on the south side of the path should be evaluated and repaired or re-designed as necessary.

Install a new universally accessible path with bituminous concrete paving on the south side of Chestnut Hill Driveway to replace the existing hard packed dirt pathway.

The existing dirt path on this side of the driveway is too narrow and does not allow for full accessibility. This existing pathway should be removed and replaced with a 5-foot wide bituminous concrete path that meets current accessibility requirements. The new path should typically have a minimum 2 or 3 foot wide grass strip along the roadway edge and a minimum 3 foot grass strip along the fence except in the areas where the distance between the curb and fence are too narrow to allow this treatment. In order to achieve these accessibility requirements, the new

path will require some degree of regrading in the area where it passes under the retaining wall. A second side path can be designed above the retaining wall to allow pedestrians a safe way to cross the Driveway at the crosswalk to reach the sidewalk on the north side of the Driveway. See the Site Treatment Recommendations Plan for the schematic route of this path.

Design a new accessible path system with bituminous concrete pavement on the hill behind the Reilly Memorial Pool and Rink.

A new path system should be designed to replace the existing path system and become a universally accessible route between Beacon Street, Commonwealth Avenue, the inner pathway, and the Reilly Memorial Pool and Rink area. The path should be designed to have no steps and a 5% or less grade which will meet accessibility guidelines. The existing paved loop path, which is not commonly used, should be removed and allowed to naturalize. The other “desire-line” dirt paths in this area, which are an erosion problem, should be filled and provisions made to limit continued pedestrian access to these dirt paths such as the installation of vegetation. There is also a good view of the Reservoir on top of the rock outcropping and provisions should be made to access this natural overlook area.



Figure 5.12: Redesigned paths behind Reilly Memorial Pool and Rink

Recommendation: Install a woodland trail connecting the Reservoir perimeter pathway and Chestnut Hill Driveway.

This new path will allow for a connection between these two areas that does not currently exist on the north side of the Reservoir. The pathway will connect at the modified parallel parking area along Chestnut Hill Driveway. The

Site Treatment Recommendations Plan shows a proposed alignment for this path. Final location of the path should be based on a study of topography, vegetation, and location of rock outcroppings. This path should meet the accessibility requirement for outdoor recreational trails. Ground disturbance should be limited. Additional study is needed to determine the appropriate paving material for this path although it is recommended that the path surface be constructed naturalistic (soft-surfaced) and permeable material. Construction of this trail should be in conjunction with the clearing of some of the understory vegetation in order to open a vista towards the Reservoir.

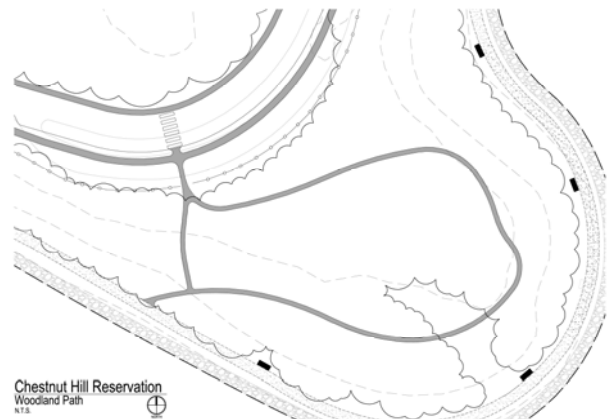


Figure 5.13: Proposed woodland path (schematic)

Recommendation: Preserve, repair, and maintain existing bituminous concrete sidewalk on north side of Chestnut Hill Driveway.

This existing sidewalk receives frequent use and should remain as a vital part of the site circulation system. A portion of this sidewalk will be required to be realigned along with the proposed changes to the Chestnut Hill Driveway.

Recommendation: Coordinate with the City of Boston to install a crosswalk across Beacon Street at Gatehouse #2.

Although this recommendation is technically outside of the Reservation boundary, DCR should coordinate with the City of Boston and the Waterworks development to provide this essential pedestrian linkage into the Reservation. An on-demand signal may be warranted for this crosswalk for pedestrian safety due to the high vehicular volume and speeds on Beacon Street.

7. Site Furnishing and Small Scale Features

a. Perimeter Fence

Recommendation: Remove the 1928-1929 perimeter fences consistent with the treatment Restoration from Gatehouse #1 to Gatehouse #2.

In order to accurately portray the 1901 appearance of the Reservation within a distinct area from Gatehouse #1 to Gatehouse #2, the RMP recommends the removal of the later 1928-1929 fence. This creates an outdoor interpretive exhibit for a small section of the Reservoir perimeter that visually communicates the accurate historic character of the landscape during the primary period of significance. At Gatehouse #1 and #2, the 1928-1929 gates and columns should be removed as well.

Removal of the fence will include cutting the steel posts to grade, removal of fence panels, and removal of the concrete footings. These removed sections of fence will need to be stockpiled at the discretion of the MWRA.



Figure 5.14: Gatehouse #2 fence gates proposed to be removed (2005)

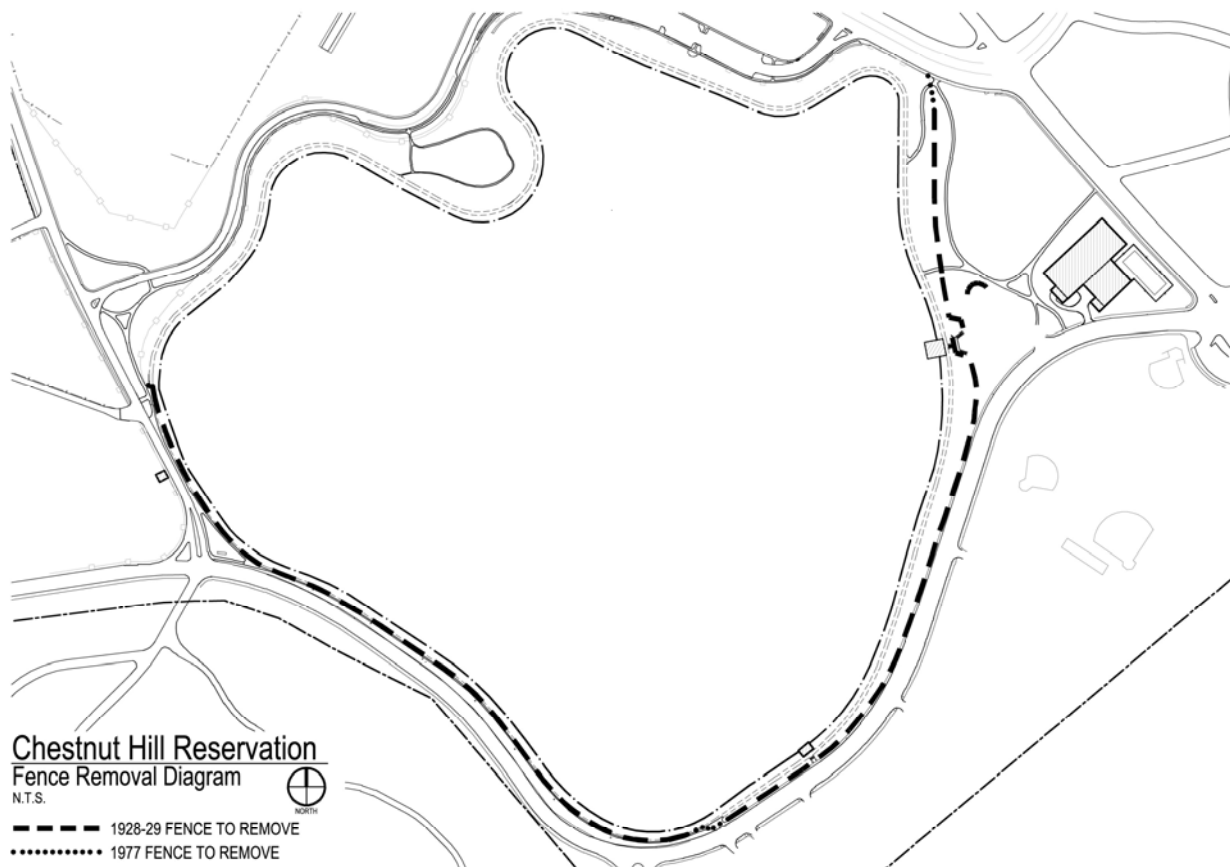


Figure 5.15: Fence removal diagram

Recommendation: Remove 1928-1929 fence in areas where it interferes with existing public use and serves no management or programmatic purpose.

As recommended in the previous Pedestrian Circulation section, the combining of the dual paths into a single bituminous concrete/stonedust path will require the removal of the fence in the southwest corner of the Reservation. The fence that runs from north of Gatehouse #1 towards Commonwealth Avenue should be removed to more fully open up this wooded area and allow for overlook opportunities.

In addition, vegetation and earth should be removed on the bottom rails of the 1977 panels in order to prevent corrosion of the posts and lower rails.

Recommendation: Replace and/or relocate the two 1977 vehicular gates with design that is compatible with landscape (after 1928-1929 fence removal).

If the DCR has or expects problems with illegal vehicular entry, other control measures such as removable bollards should be considered in place of the gates.



Figure 5.16: 1977 gate in the perimeter fence proposed to be removed (2006)

Recommendation: Retain and maintain the 1977 perimeter fence along Chestnut Hill Driveway and Saint Thomas More Road and along the Evergreen Cemetery property line.

The 1977 fence should be monitored on an annual basis and repaired and repainted as needed. Maintenance should include removal of any non-grass vegetation and sediment immediately under the bottom rail to maintain a minimum 2 inch clearance.

b. Other Site Fences

Recommendation: Retain the 1977 pipe rail fencing along the upper Chestnut Hill Driveway retaining wall.

This fence serves as fall protection. The fence should be monitored on an annual basis and repaired and repainted as needed.

Recommendation: Remove and/or repair and maintain the existing chain link fence along the Evergreen Cemetery property line fronting Saint Thomas More Road.

DCR should coordinate with the Boston Parks and Recreation Department, who owns and maintains the Evergreen Cemetery, to determine a strategy for repairing or replacing this fence.

c. Lights

The existing DCR policy is that the lands within the reservation are only open from dawn until dusk, therefore no lighting is warranted. However Saint Thomas More Road and Chestnut Hill Driveway, being part of the public infrastructure and parking, require lighting for pedestrian and vehicular safety. The Reilly Memorial Pool and Rink is also used at night thus the continued need for lighting around this building is warranted.

Recommendation: Remove the existing “cobra-head” style light fixtures along Chestnut Hill Driveway and Saint Thomas More Road and replace with a single style light fixture that is compatible with the historic character.

These street lights do not reflect the character of the historic roadways. Historic style light fixtures also serve to differentiate these roadways from the surrounding city roads and are more compatible with the character of the Reservation. The DCR standard pendent-style parkway street fixture is recommended. New street lighting should consider light pollution, energy efficiency, cost, security and consistency with other street lighting in the area.

Recommendation: Remove all 1977 pedestrian light fixtures on the hill behind the Reilly Memorial Pool and Rink.

The existing pedestrian lights no longer function and this area of the Reservation is closed after dusk.



Figure 5.17: Park lights proposed to be removed on the hill behind Reilly Pool & Rink (2006)

d. Benches

Recommendation: Install benches in the Reservation in one consistent style that is compatible with the historic character.

All existing benches should be removed, particularly bench types 2 and 3 as described in Chapter 3. New benches in a consistent style should be sited around the outside of the inner pathway at regular intervals and at important view and vista points. It is recommended that the new bench be of an historic style while still easily maintainable and vandal-resistant. See the Site Treatment Recommendations Plan for all proposed locations for new benches.

All new benches should be inspected on an annual basis to check for any needed repairs and/or repainting. The DCR should also explore a bench donation program similar to other bench donor programs coordinated by other jurisdictions.

e. Trash Receptacles

Recommendation: Place trash receptacles at appropriate areas throughout the Reservation when staffing levels increase.

The number of trash receptacle must be directly related to the ability of staff to service them. Under existing staffing levels, the existing number of trash receptacles should remain in place. But once staffing levels increase there should be a trash receptacle at every pedestrian gateway,

at the two entrances to the Reilly Memorial Pool and Rink, and at Gatehouse #1 if it is open for public use.

f. Playground

Recommendation: Remove the remainder of the 1977 playground and conduct a study on the need for a replacement playground.

The stone mound, benches, and fence should be removed to eliminate public safety hazards. The grates should be removed from the trees. Graffiti on the retaining wall should be removed and the wall repaired and repointed as needed.

DCR should analyze appropriate locations, types of suitable play equipment, size, costs, and maintenance requirements for a possible future play area at the Chestnut Hill Reservation.

g. Signage

Recommendation: Install appropriate informational signage at pedestrian gateways.

Typical informational signage will be a listing of the properties rules and regulations and property map. The map should indicate distances along major paths. Signage should also indicate the location and direction to the future Waterworks development museum.

Recommendation: Install interpretive signage in coordination with the Waterworks museum.

There is potential to develop an interpretive program in coordination with the future museum at the Waterworks development. Interpretive material relating to the development and function of the Reservoir and waterworks can be available at the museum with coordinating interpretive signs on site. The recommendations of this RMP also include developing a outdoor exhibit, with the restoration of the dam structure from Gatehouse #1 to west of Gatehouse #2. In this and other areas of the Reservation, interpretive signs could relate back to educational information displayed and distributed by the museum. Signage must be consistent with DCR graphic standards.

h. Overflow pipe

Recommendation: Improve the visual appearance of the dam overflow pipe and headwall.

Simple measures should be taken to minimize the visual impact of this area including the stabilization and reseeded of eroded areas and painting the pipe and

concrete headwall a green or black color. This effort would require coordination and approval from the MWRA.

Management Resources Recommendations

1. Recreational Uses

Recommendation: Pursue water-based recreation on the Reservoir as an appropriate recreational use.

There is the potential, based upon MWRA and other regulatory and public review, to develop a recreation program that takes advantage of the open water resource of the Reservoir. Such a program would ideally be based out of Gatehouse #1 in conjunction with its re-use strategy.

Some issues to be considered are:

- Staffing;
- Impacts on public access to Gatehouse #1;
- Whether the facility should be a private concession or solely operated by the DCR;
- Storage needs for equipment and boats, particularly during the off-season;
- Days and hours of operation; beginning and end of season.

Recommendation: Establish a bicycle policy in the Reservation, including designated routes.

DCR does not currently limit the use of bicycles in the Reservation. Regulations may be put in place that restricts bicycle use to the paved paths to prevent damage to the landscape areas. DCR should monitor the impact of bicycles on the perimeter pathway and restrict this use if it is determined to have an adverse impact on the stonedust path surface or safe pedestrian circulation. Along with this bicycle policy, bicycle racks should be installed at the Reilly Memorial Pool and Rink and below Gatehouse #1.

Recommendation: Develop site map showing primary pathways, distances, egress and access points, and other points of orientation, including parking and MBTA train and bus stations.

These site maps should easily understood by the typical Reservation visitor and be posted at all pedestrian gateways. The DCR should coordinate with the future Waterworks Museum in the installation of any site interpretive signs. Signage should be historically

appropriate and sensitive to the natural aesthetic of the Reservation and consistent with DCR graphic standards.

Recommendation: Monitor any negative impact from recreational activities.

If bicycles or other recreational uses create any negative impact, additional rules and restrictions should be considered by the DCR. Running events would be considered for Chestnut Hill Reservation provided they are approved by Division of Urban Parks and Recreation (DUPR) staff and a DCR permit is granted. DCR and the MWRA should monitor for uncontrolled pedestrian access along the raised dam structure once the fence is removed.

2. Reilly Memorial Pool and Rink

Recommendation: Develop provisions for the use of the Reilly Memorial Pool and Rink by a lessee including landscape maintenance responsibilities, parking and access requirements.

Use of the Pool and Rink should not adversely affect use of the larger Reservation lands.¹⁰

3. Surrounding Land Uses and Property Issues

Recommendation: Review the conditions of 99-year lease agreement from the City of Boston for 17.55-acre driveway parcel and negotiate gift of fee interest from the City.

It is likely that any change in the status of the 99-year lease parcel would be subject to both local and state review.

Recommendation: Consult with DCR Legal Services regarding the use of the area north of the Chestnut Hill Driveway by the Commonwealth Avenue apartments.

Currently this area has picnic tables and other site furnishings installed by the Commonwealth Avenue apartments. As a result, this area visually appears to be part of the apartment property although it is officially public land. DCR should regain control and maintenance of this area.

Recommendation: Physically define the current property line by cornerstones, blazes, or other simple boundary indicators, especially on the north side of the Reservation behind the Commonwealth Avenue apartments and Ward Street houses.

For maintenance reasons, the DCR should physically indicate the property line of the Reservation. DCR should monitor the boundary line regularly to check for encroachment or unauthorized use or access.

Recommendation: Negotiate a formal agreement with the Community Gardens.

The agreement should be structured to resolve issues of maintenance, public benefit, liability and access, including Garden Club membership requirements. Such an agreement should be consistent with those in place for the community gardens at other DCR facilities.

4. Operations and Maintenance

Recommendation: Continue and strive to enhance the typical maintenance activities within the reservation.

This would include mowing, vegetation management, street sweeping, snow removal, and repairs to existing site structures, paths, roads, utilities, and furnishings. The enhancement of these maintenance activities will require the addition of DCR staff as well as additional funding for equipment. Chapter 7 outlines a process for reservation operations including increased management levels, maintenance zones, partnership opportunities, and operational costs.

Recommendation: Prepare a program for the on-going monitoring of site vegetation.

This proposed program would be developed for the short- and long-term assessment of the health and sustainability of existing and new trees, shrubs, grasses and other plants. This will include monitoring for diseases, insect problems, hazardous vegetation, invasives, and capability with the goals and vision for the Reservation. The vegetation management plan will serve as a guide for dealing with vegetation issues as they arise.

Recommendation: Create formal maintenance agreement between Evergreen Cemetery and DCR for land alongside Saint Thomas More Road.

Land adjacent to the Cemetery on Saint Thomas More Road is currently maintained by the Cemetery (Boston Parks and Recreation). This arrangement should be formalized in a maintenance agreement to allow for continued Cemetery maintenance.

Recommendation: Create formal maintenance agreement between Boston College and DCR for land alongside Saint Thomas More Road.

Land adjacent to Boston College on Saint Thomas More Road is currently maintained by the College. This arrangement should be formalized in a maintenance agreement to allow for continued existing College maintenance.



Figure 5.18: Land along Saint Thomas More Road (2006)

Recommendation: Clean out and maintain effective function of the existing catch basins in the swale adjacent the pathway and along Beacon Street in the southwestern part of the Reservation.

The condition of these catchbasins is not known as they were not evaluated as part of the RMP. However, there is significant erosion and water puddling in the swale and along the adjacent pathway. To ensure that future problems do not arise in this area, the catchbasins should be monitored and cleaned out on a regular basis.

Recommendation: Maintain swale adjacent the pathway and along Beacon Street in the southwestern part of the Reservation clear of obstructions and dense vegetation.

Regular mowing and clearing of any volunteer woody vegetation in the swale will assist in maintaining the functionality of the catchbasins.

Recommendation: Continue DCR's current practice of snow removal.

Snow removal should continue on city sidewalks abutting the Reservation, DCR roadways, and a portion of the existing Reservoir pathway along Beacon Street where no sidewalk exists. After the proposed 6 foot wide bituminous concrete path and 4 foot wide stonedust path are installed as detailed in the Pedestrian Circulation

section, only the bituminous concrete path should be snow plowed. Snow removal along the full length of the Reservoir perimeter pathway is not recommended as the pathway has been, and was historically, a soft surface which is not suitable for plowing.

During the course of preparing this RMP, it was determined that the snow emergency restrictions along Chestnut Hill Driveway do not apply to the parking area. Those signs will be removed. However, without the parking restriction, responsibility for snow removal will fall upon the users of the parking area.

DCR should continue to work with the City of Boston to insure that city sidewalks are maintained during snow events.

5. Park Staff

See Chapter 7 for recommendations on management levels, staffing, and associated costs.

Recommendation: Develop interpretive programs and guided walks that supplement other patrols and increase visibility of staff.

Additional interpretive staff or partnership with a private group will be required to achieve this recommendation. This program should be developed in conjunction with the future Waterworks museum.

6. Law Enforcement

Recommendation: Coordinate existing patrols by various law enforcement agencies to establish regular patrol and increased visibility of security personnel.

This may require a formal agreement between the DCR Park Rangers, State Police, Boston Police, and possibly Boston College Police.

Recommendation: Establish a ParkWatch pilot program to assist the DCR in maintenance and safety issues.

This program will enhance training for park partners, public education, and park signage. The District Ranger would coordinate implementation of this recommendation.

7. Regulations

Recommendation: The DCR needs to promote and enforce regulations regarding dogs in the Reservation

and make policies clear for park users and enforcement personnel.

The dog regulations should be clearly posted on signs at all pedestrian gateways. DCR rangers and State Police should enforce the leashed dog regulation which is already in place.

Recommendation: The State Police should continue to enforce the “No Parking” on the Chestnut Hill Driveway, Saint Thomas More Road, and reservation lands during Boston College home football games and other intensive use events.

Enforcement should contain provisions for protection of landscaped areas from vehicular parking at Chestnut Hill Driveway and Saint Thomas More Road.

Recommendation: Enforce traffic rules and regulations on roads within the reservation.

The DCR Rangers and State Police, with assistance from Boston Police, should actively enforce traffic rules and speed limits on Saint Thomas More Road and the Chestnut Hill Driveway.

Recommendations for Further Study

Upon the adoption of this Resource Management Plan, DCR should pursue additional plans that build on the findings and recommendations in this document. They include (not in priority order):

1. Landscape treatment plan with detailed recommendations for new planting, pathway, site furnishings, and site features design;
2. Interpretive and sign plan (coordinated with future Waterworks Museum);
3. Gatehouse #1 rehabilitation plan;
4. Landscape design for the area around the Reilly Memorial Pool and Rink;
5. Landscape design for the area between Gatehouse #1 and the Reilly Memorial Pool and Rink. Such design can include;
 - Rehabilitation of the loop drive and reconstruction of the missing fountain in the historic courtyard area;
 - Addition of new parking for the Reservation including handicapped parking;
 - Universally accessible pedestrian access into the Reservation and to/from the parking area, Gatehouse #1 and the Reilly Memorial Pool and Rink;

- Landscaping and vegetative screening of the Reilly Memorial Pool and Rink from Gatehouse #1;
- 6. Landscape design and detailed maintenance plan for the area behind the Rink/Pool;
- 7. Update/amend the National Register and Boston Landmarks nominations to clearly define the boundaries of the historic property and address potential secondary historic contexts and periods of significance;
- 8. Coordination with City of Boston on crosswalks, street lighting, and public parking;
- 9. Analysis of play equipment needs and seating requirements.

¹ Charles Birnbaum and Chris Capella Peters. *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*. (Washington, D.C.: National Park Service, 1996), 6.

² Robert Page, Cathy Gilbert and Susan Dolan. *A Guide to Cultural Landscape Reports* (Washington, D.C.: National Park Service, 1990), 81.

³ Birnbaum and Capella Peters, Guidelines, p. 90.

⁴ MA Division of Fish and Wildlife, 1990.

⁵ Blossey, 2001; Blossey and Schroeder 1995.

⁶ Chemical applications for invasive species control may require an Order of Conditions from the Boston Conservation Commission and should meet DCR integrated pest management (IPM) policies.

⁷ Blossey, 2001; Blossey and Schroeder 1995.

⁸ LEC personal communication with MA Division of Fisheries and Wildlife.

⁹ The original historic fountain was relocated by the MDC in 1977 and is now part of the Waterworks development. The original fountain is now owned by the Waterworks development thus a new fountain to match the original fountain design will need to be constructed.

¹⁰ The RMP does not make any recommendations regarding the internal operations of the Reilly Memorial Pool and Rink.